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REMARKS

In response to the Office Action dated November 17, 2004, the Applicant has amended Claims 15, 17, 33, 35, 47, 49, 54 and 56. Claims 16, 34, 46, 48 and 55 have been canceled. Thus, Claims 15, 17-33, 35-45, 47, 49-54 and 56-60 remain pending in the application. Reconsideration of the claims, as amended, is respectfully requested.

The official action rejected Claims 15, 21, 27-30, 33, 39, 47, 51, 54 and 58 under 35 U.S.C. §103(a) as being unpatentable over *Iwamatsu*. Additionally, Claims 16, 32, 34, 39, 46, 48 and 55 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Iwamatsu* in view of *Gehring*. Applicant has amended Claim 15 to include the limitation of repositioning select ones of the virtual locations to apparent positions above and below the azimuthal plane and mixing the plurality of sound signals including repositioned select ones of the virtual locations, to provide the left output and the right output signal. Thus, Claim 15 has been amended to also include the limitations of previous Claim 16, which was rejected in view of *Iwamatsu* and *Gehring*. The official action has admitted that the *Iwamatsu* reference does not describe repositioning select ones of the virtual locations to apparent positions above and below the azimuthal plane and has cited the *Gehring* reference as teaching this limitation. Applicant respectfully traverses.

As recited herein above, Claim 15 recites repositioning select ones of the virtual locations. Thus, not all of the virtual locations are repositioned but only select ones of the virtual locations are repositioned. The *Gehring* reference provides no discussion of repositioning select ones of virtual locations. While the *Gehring* reference describes at Column 2, Lines 11-14 that sound may be repositioned by changing the HRTF's, there is no discussion therein of repositioning select ones of a number of virtual locations. Thus, the Applicant respectfully submits that the combination of the *Iwamatsu* and *Gehring* reference fail to disclose each and every limitation of the Applicant's Claim 15.

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Furthermore, the Applicant respectfully submits that the *Iwamatsu* reference does not describe binauralizing a non-binauralized input signal. As discussed in the *Gehring* reference, binaural sound and commercial stereophonic sound are both conveyed with two signals, one for each ear of a user (Column 1, Lines 30-31). Nothing in the *Iwamatsu* reference indicates that the conversion between the surround sound described therein to the two speakers 84 and 86 is converting them to a binauralized signal. The description is consistent with that associated with stereophonic sound. Thus, the official action's position that the signals are provided to left and right speakers in and of itself indicates the signal is binaural is not supported by the *Iwamatsu* reference. Therefore, the Applicant respectfully submits that Claim 15, and all claims dependent therefrom, are distinguishable from the art of record and a Notice of Allowance is respectfully requested.

Claim 33 has been amended to include limitations similar to those of Claim 15. Applicant respectfully submits that Claim 33 is allowable over the combination of the *Iwamatsu* and *Gehring* reference for similar reasons. Furthermore, Claim 33 has been amended to include the limitation of "wherein the perceived virtual locations of the sound signals do not vary with movement of the user or of the listener's head in the azimuthal plane at the listening location." This comprises previous Claim 46. In describing that this limitation was illustrated in the *Gehring* reference, the official action states that "it is clear from reviewing each cited reference, that there is no mention of tracking the user's head movements, such that the sounds recreated in the headsets are produced based on the HRTF functions and the original input signals." The official action then goes on to state that the combination of *Iwamatsu* in view of *Gehring* makes obvious all limitations of this claim. Applicant is confused by this statement since if, as the official action states, there is no mention in the references of tracking the user's head movements such that the sounds recreated in the headsets are produced based only on the HRTF functions and the original signals, the references could not disclose any limitations of Applicant's Claim 46. If there is no disclosure in the *Gehring* reference, the *Gehring* reference can teach nothing with respect to this limitation. Therefore, the Applicant respectfully submits that Claim 33, and all claims dependent therefrom, are distinguishable from the art of record and a Notice of Allowance is respectfully requested.

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Claims 47 and 54 have been amended to include the limitation of means for repositioning select ones of said virtual locations to apparent positions above and below said azimuthal plane and means for mixing said plurality of sound signals representing said virtual locations including repositioned select ones of said virtual locations to provide said left output signal and said right output signal. Applicant respectfully submits that Claims 47 and 54, and all claims dependent therefrom, are distinguishable from the combination of *Iwamatsu* and *Gehring* for reasons similar to those discussed with respect to Claim 15. A Notice of Allowance for these claims is respectfully requested.

Claims 31 and 45 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Iwamatsu* in view of *Gehring* and further in view of *Begault*. Applicant respectfully submits that these claims, being dependent upon Claims 15 and 33 respectively, are allowable as the *Begault* reference does not overcome the shortcomings of *Iwamatsu* and *Gehring*.

Claims 18-20, 36-38, 50 and 57 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Iwamatsu* in view of *Gehring* and further in view of *Görike*. Applicant respectfully submits that these claims, being dependent upon Claims 15, 33, 46 and 54 respectively, are allowable for similar reasons as the *Görike* reference fails to overcome the shortcomings of *Iwamatsu* and *Gehring*. A Notice of Allowance is respectfully requested.

Claims 17, 22-26, 35, 40-44, 49, 52, 53, 56, 59 and 60 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Iwamatsu* in view of *Miyamori et al.* Applicant respectfully submits that these claims, being dependent upon previously discussed Claims 15, 33, 346 and 54, are allowable for similar reasons as the combination of *Iwamatsu* and *Miyamori et al* failed to overcome the shortcomings of *Iwamatsu* and *Gehring*. A Notice of Allowance is respectfully requested.

Applicant has now made an earnest attempt in order to place this case in condition for allowance. For the reasons stated above, Applicant respectfully requests full allowance of the

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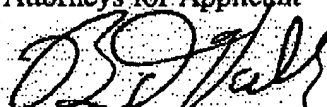
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claims as amended. Please charge any additional fees or deficiencies in fees or credit any overpayment to Deposit Account No. 20-0780/OXMO-24,721 of HOWISON & ARNOTT, L.L.P.

Respectfully submitted,
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